

# Non-Grade Floor Egress Windows

#### **REVISION DATE: JANUARY 2017**

**Non-Grade floor opening:** An egress window is a window that is required in specific locations in a dwelling and is intended to provide an emergency means of exiting a dwelling. Windows must meet specific size requirements to qualify as an egress window. A non-grade egress window is a opening



located such that the sill height of the opening is more than 44-inches above or below the finished ground level adjacent to the house.

Egress windows are required in every room used for sleeping purposes (bedrooms) on any floor and in basements and attics with habitable space. If you are constructing a new home, the code requires that you put an egress window in each bedroom. It also requires an egress window in the basement if habitable rooms will be finished in the basement. If you install a basement bedroom or

bedrooms, an egress window is required in each bedroom but you need not provide another egress window if there are other habitable rooms in the basement. The bedroom window suffices for the habitable rooms.

If you have an existing home and you add a sleeping room in an unfinished basement, the code requires that you install an egress window in the sleeping room or rooms. Likewise, if you create habitable space in your basement other than a bedroom and you currently do not have an egress window, the code would require that you install one as part of the installation of the habitable room.

Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3 of the International Residential Code. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well.

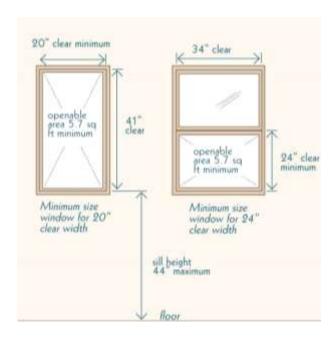
When the required second exit in a bedroom is a window, it must open to a size that allows the residents an escape route and a firefighter to enter while wearing an oxygen pack. The sill must not be higher than 44-inches from the finished floor. The operable portion of the window must be at least 24-inches high and at least 20-inches wide, with a net area at least 5.7-square feet per table 1.

Table 1: Bedroom Window Egress: Minimum Height and Width Requirements (inches) for 5.7 SF Opening															
Width	20	20 1/2	21	21 1/2	22	22 1/2	23	23 1/2	24	24 1/2	25	25 <sup>1</sup> / <sub>2</sub>	26	26 <sup>1</sup> / <sub>2</sub>	
Height	41	40	39 <sup>1</sup> / <sub>2</sub>	38 1/2	37 1/2	36 <sup>1</sup> / <sub>2</sub>	35 <sup>1</sup> / <sub>2</sub>	35	34 1/2	33 1/2	33	32 <sup>1</sup> / <sup>2</sup>	31	31	
Width	27	27 1/2	28	28 1/2	29	29 <sup>1</sup> / <sub>2</sub>	30	30 <sup>1</sup> / <sub>2</sub>	31	31 <sup>1</sup> / <sub>2</sub>	32	32 1/2	33	33 <sup>1</sup> / <sub>2</sub>	34
Height	30 <sup>1</sup> / <sub>2</sub>	30	29 1/2	29	28 <sup>1</sup> / <sub>2</sub>	28	27 1/2	27	26 <sup>1</sup> / <sub>2</sub>	26 <sup>1</sup> / <sub>2</sub>	25 <sup>1</sup> / <sub>2</sub>	25 <sup>1</sup> / <sub>2</sub>	25	24 1/2	24

# Non-Grade floor, egress window dimensions:

- Maximum height of 44 inches from floor to top of sill
- Minimum net clear height of 24 inches
- Minimum net clear width of 20 inches
- Minimum net clear opening of 5 square feet

If			If				
The opening is the 20	-inch minimum width	The opening is the 24-inch minimum height					
Then			Then				
It must be a minimum	of 41.1-inches high	It must be a minimum of 34.2-inches wide					
20 x 41.1 = 822	822/144 = 5.708 square feet	24 x 34.2 = 820	820/144 = 5.708 square feet				



### **Emergency Escape and Rescue Required**

Basements with habitable space and every sleeping room shall have at least one operable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where openings are provided as a means of escape and rescue they shall have a sill height of not more than 44 inches above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3 of the International Residential Code. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well

### **Minimum Opening Area**

All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet

### **Minimum Opening Height**

The minimum net clear opening height shall be 24 inches

### Minimum Opening Width

The minimum net clear opening width shall be 20 inches

### **Operational Constraints**

Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

### Window Wells

Window wells required for emergency escape and rescue shall have horizontal dimensions that allow the door or window of the emergency escape and rescue opening to be fully opened. The horizontal dimensions of the window well shall provide a minimum net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.

#### **Exception:**

The ladder or steps shall be permitted to encroach a maximum of 6 inches into the required dimensions of the window well.

## **Ladder and Steps**

Window wells with a vertical depth greater than 44 inches below the adjacent ground level shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Sections R314 and R315. Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

### **Bulkhead Enclosures**

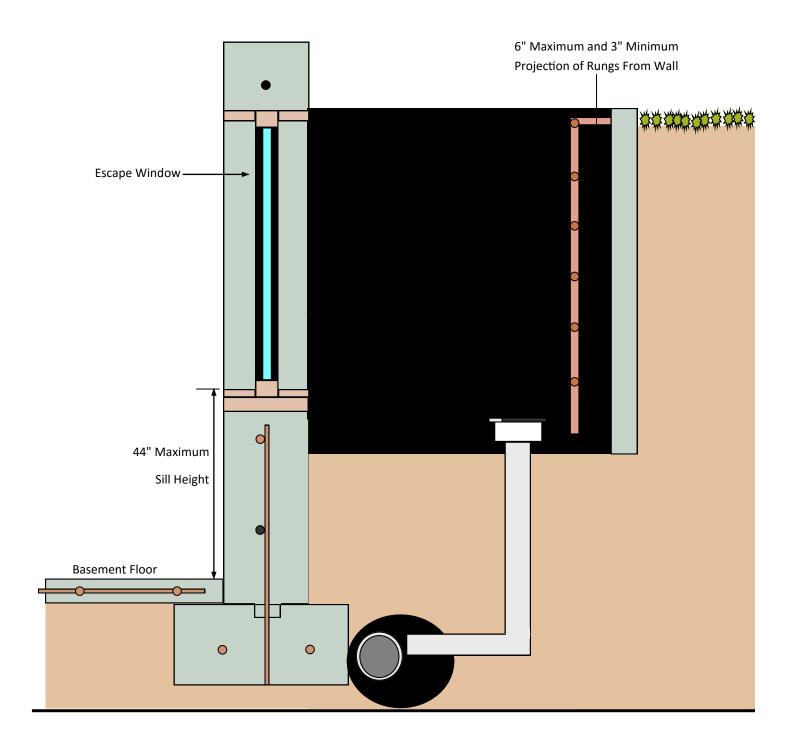
Bulkhead enclosures shall provide direct access to the basement. The bulkhead enclosure with the door panels in the fully open position shall provide the minimum net clear opening required by Section R310.1.1. Bulkhead enclosures shall also comply with Section R314.9.

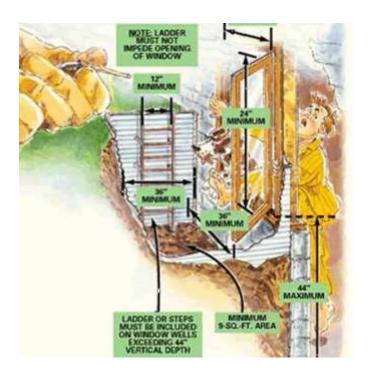
## Bars, Grills, Covers and Screens.

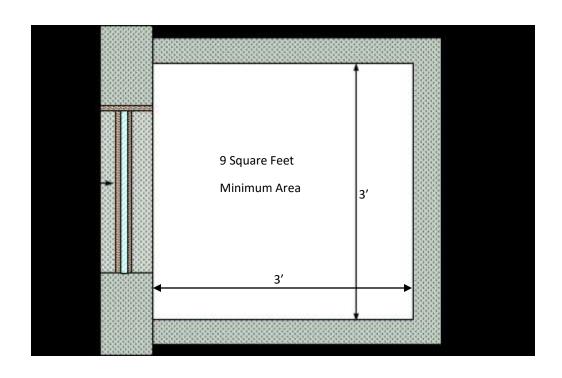
Bars, grills, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with the minimum dimensions, and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

### Child Fall Prevention

Window openings 72 inches above the surface below and less than 24 inches above the interior floor are required to have opening control devices that will not allow a 4 inch sphere to pass through the opening.







The Community Development Department is made up of five full-time employees including a Department Director, Administrative Assistant, Principal Planner, Building Inspector, and Code Compliance Official. Our office is located at 204 North Main Street. The goal of the department is to serve the citizens of Republic through pursuance, guidance, and assistance in the development of the City. This is accomplished through marketing and strategic planning accompanied by oversight and enforcement of the City's Building Codes, Zoning Codes and Subdivision Regulations.

Community Development Department 204 North Main Street Republic, MO 65738-1473 Across from City Hall

Phone: 417-732-3150 Fax: 417-732-3199

E-mail: wzajac@republicmo.com



### **Community Development Department**



